

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) Method to rate a discrete decoded picture in respect to its quality, characterized by comprising:

calculating a picture quality rating function (PQRF; PQRF-B) on a basis of an information about artefacts (ARI; MSDS) within the discrete decoded picture and a coding information (CRI; MQuant) which that was used for discrete coding of the picture picture,

wherein the information about artefacts (ARI) is a criterion of discontinuity (MSDS) and the coding information (CRI) is a scaling factor (MQuant),

wherein the picture quality rating function represents a sum of a first function dependent on the criterion of discontinuity (MSDS) and a second function dependent on the scaling factor (MQuant), and

wherein the first and second functions have the general structure

$$f(x) = k \cdot e^{-x/\gamma} + d$$

with k and γ being scaling factors and d represents an offset.

2. (Canceled)

3. (Currently Amended) Method according to claim [[2]] 1, characterized by retrieving said scaling factor (M_{Quant}) from the discrete decoded picture on basis of a number of bits used for discrete coding the picture.

4. (Currently Amended) Method according to claim [[2]] 1, characterized by determining said criterium criterion of discontinuity (MSDS) based on a rating of transitions in-between neighboured neighbored blocks of the discrete decoded picture.

5. (Currently Amended) Method according to claim 4, characterized by rating transitions in-between neighboured neighbored blocks dependent on at least one respective main gradient and one respective sub gradient of a transition in-between neighboured neighbored blocks.

6. (Currently Amended) Method according to claim 4, characterized by rating transitions in-between neighboured neighbored blocks based on a sum of a squared difference of all respective main gradients and all respective sub gradients of a transition in-between neighboured neighbored blocks.

7. (Currently Amended) Method according to claim 4, characterized by rating transitions in-between neighboured neighbored blocks based on a sum of all transitions in-between neighboured neighbored blocks.

8. (Currently Amended) Method according to claim [[2]] 1, characterized by determining said picture quality rating function (PQRF-B) distinct in respect to horizontal and vertical transitions.

9. (Currently Amended) Method according to claim [[2]] 1, characterized in that said picture quality rating function indicates a maximum quality in case the scaling factor (MQuant) indicates a high correlation with the picture.

10. (Currently Amended) Method according to claim [[2]] 1, characterized in that said picture quality rating function indicates a maximum quality in case the ~~criterium~~ criterion of discontinuity (MSDS) indicates a small discontinuity.

11. – 12. (Canceled)

13. (Currently Amended) Method according to claim 12 1, characterized in that said first function is defined by

$$f_1(\text{MSDS}) = 100 \cdot e^{-\text{MSDS}/1000}$$

and said second function is defined by

$$f_2(\text{MQuant}) = 100 \cdot e^{-\text{MQuant}/5}$$

14. (Original) Method according to claim 1, characterized in that said discrete coding/decoding is based on a discrete cosine transform function.
15. (Original) Use of the method defined in claim 1 to determine a preferred discrete picture decoding and/or post-processing method.
16. (Original) Use of the method defined in claim 1 to determine a preferred discrete picture encoding and/or pre-processing method.
17. (Original) Computer program product comprising computer program means adapted to perform all the steps defined in claim 1 when said program is executed on a computer.